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Lesson 10 **Linking Frames**

Lesson Topics

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Linking Frames Overview

In Lesson 9: *Advanced Frame Layout*, you learned to create both simple and complex frame configurations. All of the frames you have created, however, work relatively independently. Although they share the same page and typically contain related subject matter, they are not *dynamic*. In other words, the manner in which a user interacts with one frame does not affect the contents of another frame.

Nav Bars & Navigation Structures

By linking frames, you can create even more sophisticated page and site layouts, such as a nav bar, a table of contents, or an online catalog. In this manner, you can use frames to control the manner in which a user navigates your entire Web site.

You already know how to create hyperlinks using the Anchor tag (<A>). To link frames, you simply have to learn some new attributes to tags you already understand. As you begin to harness the more powerful aspects of HTML, much of the new power of the scripting language comes from new attributes to “old” tags.

NAME & TARGET

There are two new attributes you need to learn in order to create a basic link between two frames. The first is **NAME**, which is an attribute to the <FRAME> tag that provides a unique identifier to a slave frame document. The second is **TARGET**, which is an attribute to the <A> tag. Basically, the **TARGET** attribute tells the Anchor tag *where* (in what frame) to display an HTML document.

- **NAME**: attribute to the <FRAME> tag; provides a unique identifier to a frame so that an Anchor tag can link to it.
- **TARGET**: attribute to the <A> tag; instructs the Anchor tag to display the file to which it links in a particular frame (by identifying a **NAME** reference within a <FRAME> tag).

The script for a simple link in one frame that loads a different HTML document into a *different* frame is as follows:

1. Script in frame that changes:

```
<FRAME SRC=slave1.htm NAME=changeme>
```

2. Script in frame which contains a hyperlink that changes the above frame:

```
<A HREF=slave2.htm TARGET=changeme>Click here to view more  
information</A>
```

Exercise 10-1: Creating a Simple Link Between Frames

In this exercise, you will create a simple link between two frames in a single page.

1. Open a new file in Notepad.
2. Type the following script:

```
<HTML>

<HEAD>
<TITLE>Explore the Great Lakes</TITLE>
</HEAD>

<FRAMESET ROWS="*,2*">

    <FRAMESET COLS="3*,2*">
        <FRAME SRC=title.htm NAME=title>
        <FRAME SRC=index.htm NAME=index>
    </FRAMESET>

    <FRAME SRC=erie.htm NAME=main>

</FRAMESET>

<NOFRAMES>

<H3>Welcome to the "Exploring the Great Lakes" Web Site</H3>

You need a frames-compatible browser, such as Netscape 2.0 and
above, to view this site.

</NOFRAMES>

</HTML>
```

3. Save the file as MASTERLINK.HTM in the HTML-2 folder.

4. Open a new file in Notepad. Type the following script:

```
<HTML>

<HEAD>
</HEAD>

<BODY BGCOLOR=blue>

<CENTER>

<FONT SIZE=+3 COLOR=white>Exploring the Great Lakes</FONT><BR>

</CENTER>

</BODY>
</HTML>
```

5. Save the file as TITLE.HTM in the HTML-2 folder.
6. Open a new file in Notepad. Type the following script:

```
<HTML>

<HEAD>
<TITLE>Hyperlink Navigation</TITLE>
</HEAD>

<BODY>

<CENTER>

<A HREF=erie.htm TARGET=main>Lake Erie Info</A><BR>
<A HREF=erie.jpg TARGET=main>Lake Erie Photo</A><P>

<A HREF=michigan.htm TARGET=main>Lake Michigan Info</A><BR>
<A HREF=michigan.jpg TARGET=main>Lake Michigan Photo</A><P>

<A HREF=superior.htm TARGET=main>Lake Superior Info</A><BR>
<A HREF=superior.jpg TARGET=main>Lake Superior Photo</A><P>

</CENTER>

</BODY>
</HTML>
```

7. Save the document as INDEX.HTM in the HTML-2 folder.
8. Toggle over to your Web browser.
9. Open the file MASTERLINK.HTM from the HTML-2 folder.



A three frame page is downloaded and displayed, as shown in Figure 10-1.

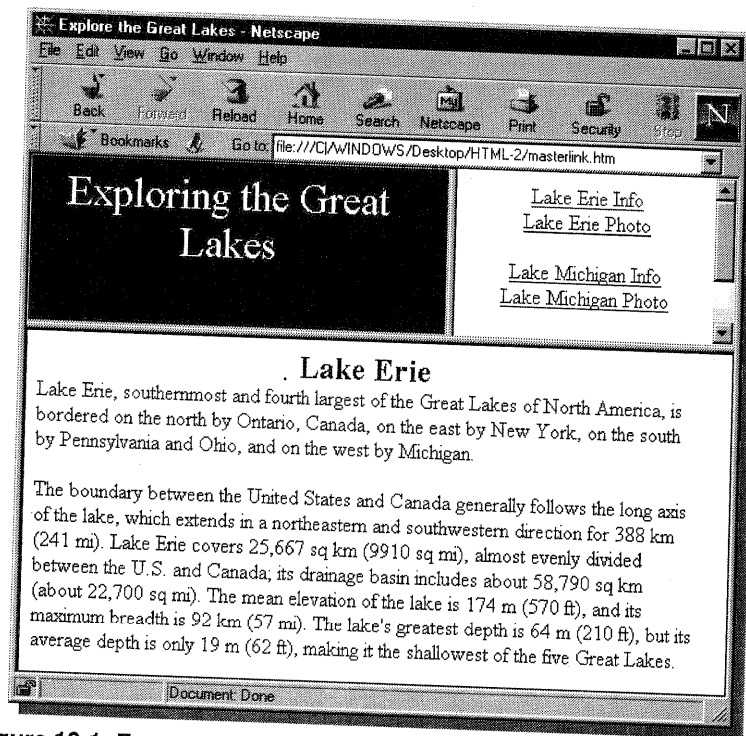


Figure 10-1: Example of frames linking to other frames in a single page

10. In the upper right frame, click the Lake Michigan Info hyperlink.



The contents of the main (lowest) frame change to display the content of the MICHIGAN.HTM document.

11. In the upper right frame, click the Lake Erie Photo hyperlink.



The contents of the main frame change to display the file ERIE.JPG, as shown in Figure 10-2. Note that this is not an HTML document, but rather a stand-alone image file.

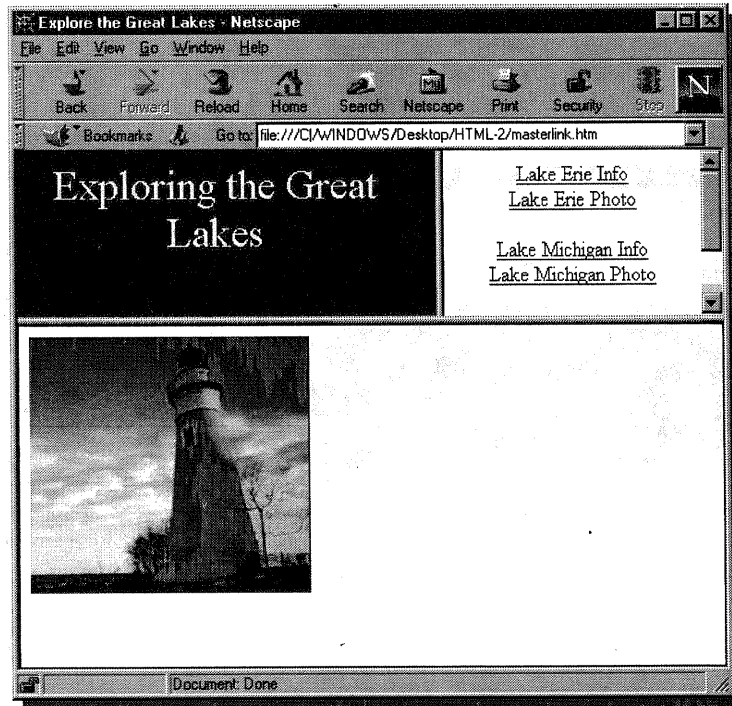


Figure 10-2: Main frame contents changed by clicking link in upper right frame



When you want to display images, you can save yourself time and effort by displaying the raw image file (instead of embedding the image file in an HTML document).

Referring directly to an image file, however, does not allow you to format the image by adding a caption or centering the image.

12. Click all of the other links in the upper right frame to ensure that they function properly. If any of the links do not work, open INDEX.HTM, find the problem, and fix it. Retest any links after you repair them.

<BASE> Tag

You can greatly simplify the script involved in the Anchor tags in a referring frame. Using the <BASE> tag allows you to specify the target of all Anchor tags in the page with a single TARGET attribute.

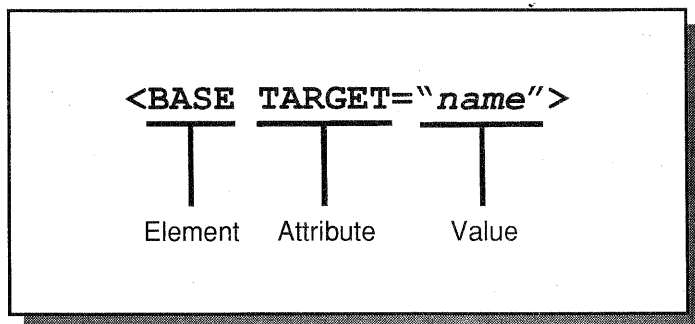


Figure 10-3: Syntax of the <BASE> tag when used to specify a frame hyperlink target

An example of a referring frame with the <BASE> tag and TARGET attribute follows:



```
<HTML>
<BASE TARGET="name">
<HEAD>
<TITLE>Your Page Title</TITLE>
</HEAD>
<BODY>
```



If both a hyperlink (Anchor tag) with a TARGET attribute and a <BASE> tag with a TARGET attribute are present in the same referring frame, the Anchor tag TARGET takes precedent.

In other words, if all Anchor tags have their own TARGET attributes, any TARGET contained in the <BASE> tag will be ignored.

Exercise 10-2: Simplifying a TARGET with Multiple Hyperlinks

In this exercise, you will simplify the INDEX.HTM page by omitting the individual TARGET attributes in the Anchor tags and replacing them with a single TARGET attribute at the beginning of the HTML document.

1. Toggle over to Notepad.
2. Open INDEX.HTM.
3. Remove the TARGET attributes from each of the Anchor tags ``.
4. Type the following script that appears in bold:

```
<HTML>

<BASE TARGET=main>

<HEAD>
<TITLE>Hyperlink Navigation</TITLE>
</HEAD>
```

5. Save INDEX.HTM.
6. Toggle over to your Web browser.
7. Reload **MASTERLINK.HTM** in your Web browser.
8. Click any link in the upper right frame.



The frames should function exactly as in the previous exercise; the purpose of this exercise was to illustrate that you can save yourself considerable time and effort by placing a single TARGET attribute in a `<BASE>` tag above the `<HEAD>`, instead of a TARGET attribute in each of the anchors that refers to the target frame.

Reserved TARGET Values

Four reserved TARGET attribute values (sometimes called *reserved implicit frame names*) can be used to create specific results when a user clicks a hyperlink in a frame.

You can use these reserved TARGET values to:

- load the results of a hyperlink into a new, unnamed window;
- load the content into the calling frame (in which the anchor itself resides);
- load content called by an anchor into a parent frame set;
- load content called by an anchor into a “top level” frame set.

Table 10-1 displays these four reserved TARGET values.

Attribute Value	Function
<code>_blank</code>	Loads the HTML document (or file, as in the case of an image) specified in the Anchor tag into a new, unnamed window. This will completely wipe out the current frame set in the browser window.
<code>_self</code>	Loads the HTML document (or file) into the calling (referring) frame. This is the default if no NAME or TARGET attributes are used in the frame set.
<code>_parent</code>	Loads the HTML document into the calling frame's parent frameset window.
<code>_top</code>	Loads the HTML document into the calling frame's top level frame set.

Table 10-1: The four implicit reserved frame names (TARGET attribute values)



You can use the `_blank` value with any hyperlink anchor; it does not have to be a frames page or a link from one frame to another frame. In this manner, you can offer a link on your Web site that refers to a page on another Web site without pushing the user away from your site.

When the user clicks the link, a new window will appear on his or her desktop, in addition to the window displaying the referring anchor. When the user is done viewing the new page, he or she can close out of the window, exposing the original page containing the calling anchor on your site.

Exercise 10-3: Using Reserved TARGET Values

In this exercise, you will use two of the reserved TARGET values to link from one frame to another.

1. Toggle over to Notepad.
2. Open INDEX.HTM (if necessary).
3. Add the following script that appears in bold:

```
<HTML>

<BASE TARGET="_blank">

<HEAD>
<TITLE>Hyperlink Navigation</TITLE>
```

4. Save the HTML document.
5. Toggle over to your Web browser.
6. Reload MASTERLINK.HTM.
7. In the upper right frame, click any of the hyperlinks.



The target of the calling hyperlink is opened in a new window that overlaps the existing window.

8. Toggle back to Notepad.
9. Add the following script that appears in bold:

```
<HTML>

<BASE TARGET="_self">

<HEAD>
<TITLE>Hyperlink Navigation</TITLE>
```

10. Save the HTML document.

11. Toggle over to your Web browser.
12. Reload the Web page.
13. In the upper right frame, click any of the hyperlinks.



The target of the calling hyperlink is opened in the upper right frame, the frame from which it was called, as shown in Figure 10-4.

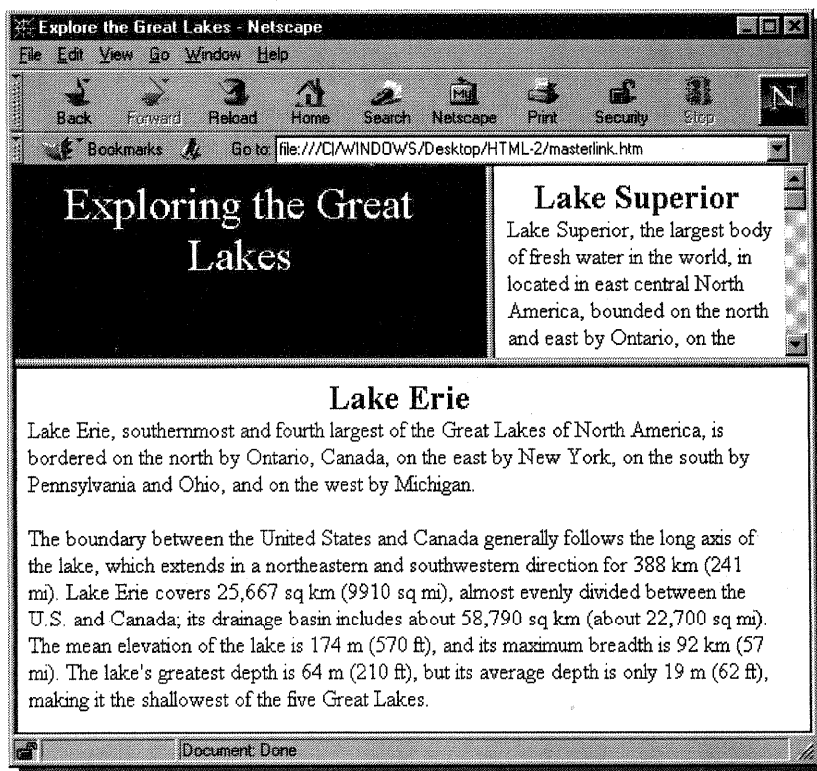


Figure 10-4: Hyperlink displays referred document in same frame via TARGET="_self"

14. On the toolbar, click the **Back** button. The frame will display its previous contents.
15. In the upper right frame, click another hyperlink. The contents of the frame will change to display the target HTML document.

Navigation Bars

A functional application of links between frames is that of a navigation bar, or “nav bar.” Nav bars, which are typically available from each page of a Web site, are narrow strips of the page partitioned off through the use of two or three frames, as shown in Figure 10-5.

The nav bar, which can appear on the left, right, top, or bottom of the page (most commonly in the left frame), acts as a convenient index to the contents of the entire site. The nav bar also prevents a visitor to your site from becoming lost or confused, especially on large sites.

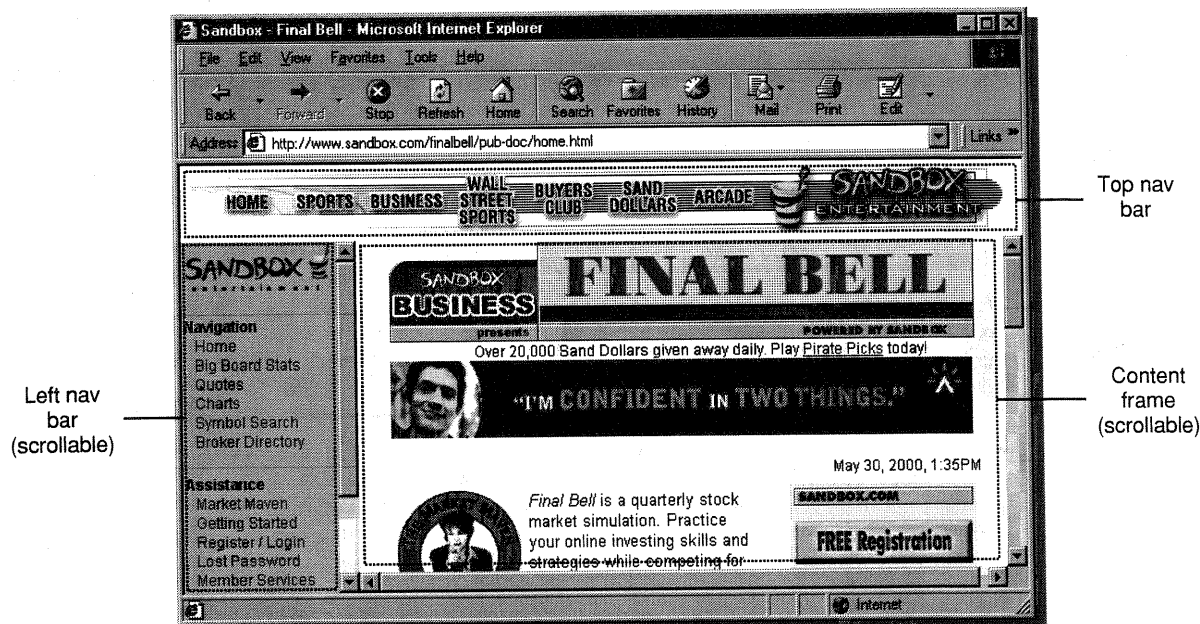


Figure 10-5: An example of a Web site featuring a nav bar created with linked frames

Link to Main Content Areas Only

The nav bar should be a “top level” overview of the main content areas of the site. It should accomplish two major goals: 1) provide access to the major topic areas of your Web site and 2) provide a quick and convenient visual synopsis of the contents of your site to all visitors.

The following general rules should be observed when adding a nav bar to your Web site:

- the nav bar should not provide links to *too many* topic areas; it should truly be access to only the top level subject areas of your site (6-12 links);
- the nav bar should not provide links to *too few* areas; it should give the user a brief, but comprehensive, glimpse of the contents of your site;
- the nav bar should appear on every page of your site;
- the nav bar should contain text hyperlinks that are clearly understood (not ambiguous icons or confusing graphics).

Exercise 10-4: Surveying Nav Bar Examples on the Web

In this exercise, you will view examples of actual nav bars integrated into Web sites using HTML frames.

1. Click once in your Web browser's **URL** field, type the following address, and press **<ENTER>**:

➤ **www.familycenteredcare.org**



A Web page that is composed of three frames is downloaded and displayed. The top frame acts as a nav bar. The left frame integrates with the top to create a smooth, attractive appearance. The bottom frame is the content frame, as shown in Figure 10-6.



Figure 10-6: Example of nav bar at top of page that does not change

2. At the top of the nav bar, click the **About Us** hyperlink.



A new page, featuring a new frameset, is downloaded and displayed. Note that the nav bar in the top frame is different for the new page.

3. On the toolbar, click the **Back** button.
4. On the nav bar, click the **Family Forum** hyperlink.



A new page is downloaded and displayed. The content area changes completely.

Note the seamlessness of the frames. The author(s) of this site employed the `FRAMEBORDER=0` and `BORDER=0` attributes in the `<FRAMESET>` opening tag.

5. Click once in the **URL** field, type the following address, and press `<ENTER>`:

➤ **`www.finalbell.com`**



The home page will be downloaded and displayed.

6. Notice that the page is split into three frames, very similar to the previous example. However, the left frame features a scroll bar.
7. In the nav bar in the top frame, click the **BUSINESS** hyperlink. The *Business* page will be downloaded and displayed.



Although a new frameset was downloaded, the nav bar did not move, expand, or change in any manner, as shown in

Figure 10-7 on the following page. This is a standard nav bar containing multiple hyperlinks that download and display pages in the content frame using the `TARGET` and `NAME` attributes.

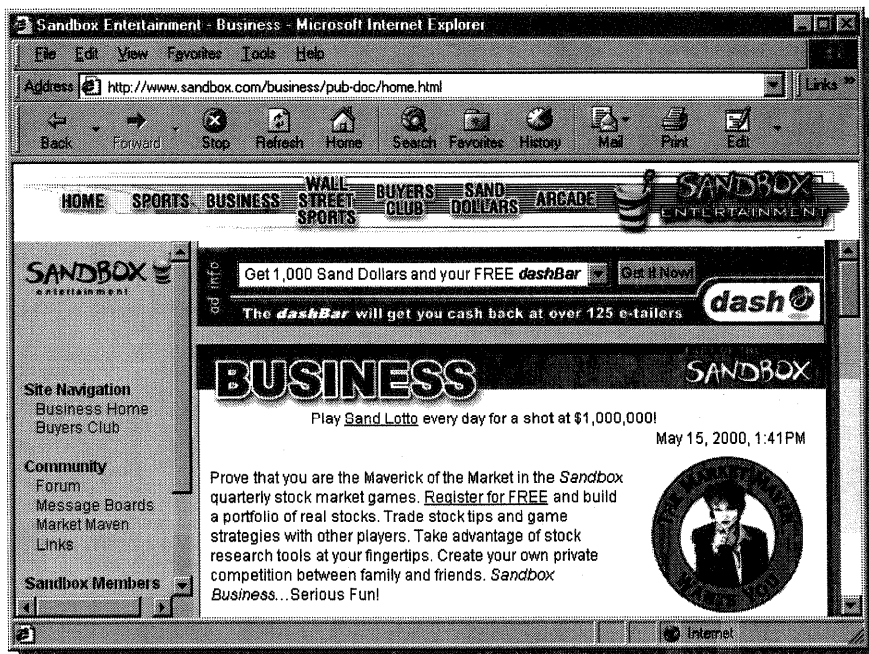
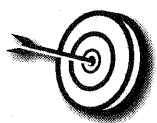


Figure 10-7: Page accessed via an anchor (link) on the nav bar

8. Click a different link on the nav bar to download and display a different HTML document in the content frame.
9. Click once in the **URL** field, type the following address, and press <ENTER>:

➤ **www.aetcorp.net**



The AET Corporation home page is downloaded and displayed. The home page does not feature frames or nav bars, but the subpages do.

10. On the home page, click the **products** hyperlink. Another page will be downloaded that displays three frames, one of which is a nav bar.
11. In the left frame nav bar, click the **training** hyperlink.

A new page is downloaded and displayed in the content frame, as shown in



Figure 10-8 on the following page. The nav bar does not change.

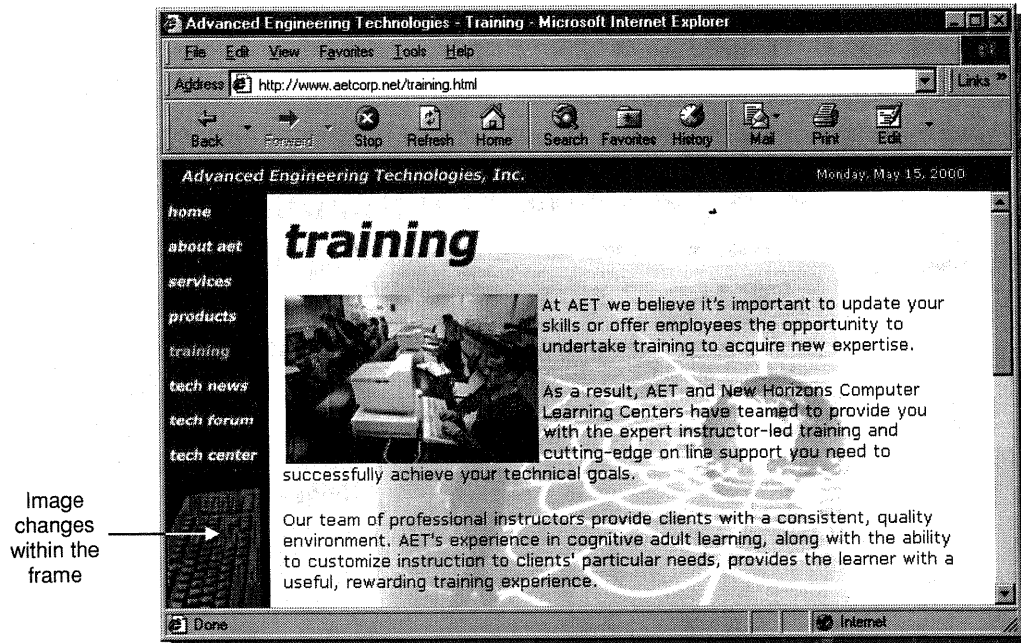


Figure 10-8: Nav bar configured as left frame

12. In the nav bar, click the tech news hyperlink.



The contents of the main frame change to display the new page that is downloaded. The top frame does not change. The bottom of the left nav bar frame switches to a new image.

13. In the nav bar, click the Services hyperlink. This will download and display a new HTML document in the main content frame and change the image at the bottom of the nav bar.
14. Click other links in the nav bar, noting the different images that appear at the bottom of the nav bar frame.
15. If time permits, visit www.tsrc.net/newhome.nsf. Use the nav bars in the top and right frames to view different Web pages on this site.
16. What is different about this site from the others you visited in this exercise?

Creating a Nav Bar

Before you add a nav bar to an existing Web site or create a new site that will feature one, you should think about the consequences it will have on your site. Remember that the nav bar should appear on every page of the site (or nearly every page).

In the following set of exercises, you will create a set of Web pages, each of which is laid out as a three frame page. Each frame will serve a different purpose as listed below:

- top frame: a masthead, displaying the name of a fictitious organization;
- left frame: the nav bar;
- right frame: the content frame and the target of any HTML documents referred to by anchors in the nav bar.

Plan Your Page Layout

You should first plan the layout of your page using no references to actual slave frame files. This will allow you to determine the exact layout of the masthead frame, the nav bar frame, and the content frame.

The frames layout on the pages you will create in the following exercises is shown in Figure 10-9.

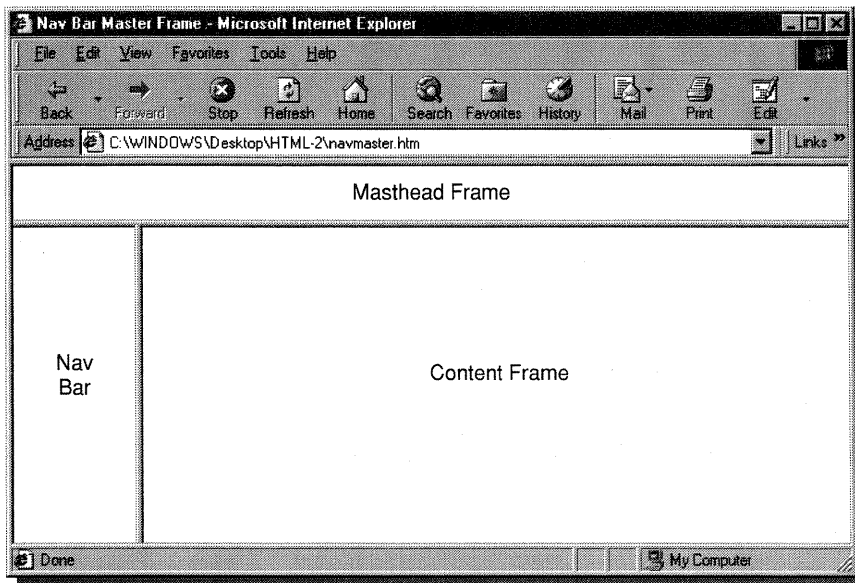


Figure 10-9: Layout of a Web site incorporating a frames-based nav bar

Exercise 10-5: Laying Out the Frame Document

In this exercise, you will create the master frame document for a Web site that incorporates a nav bar on each page of the site.

1. Toggle over to Notepad.
2. Open a new document in Notepad.
3. Type the following script:

```
<HTML>

<HEAD>
<TITLE>Nav Bar Master Frame</TITLE>
</HEAD>

<FRAMESET ROWS="15%,85%">

    <FRAME SCROLLING=no NORESIZE>

    <FRAMESET COLS="15%,85%">
        <FRAME NORESIZE>
        <FRAME NAME=master NORESIZE>
    </FRAMESET>

</FRAMESET>

</HTML>
```

4. Save the document as NAVMASTER.HTM in the HTML-2 folder. Note that this document does not include the necessary attribute SRC for each <FRAME> tag. You will add these in a later exercise.
5. Toggle over to your Web browser.
6. Open NAVMASTER.HTM from the HTML-2 folder. It should appear similar to Figure 10-9 on the previous page.



A unique characteristic of both Microsoft IE 5.0x and Netscape Navigator 4.0x is that both will properly interpret and display a frames document lacking SRC attributes. The result is a frames page containing blank frames, as shown in Figure 10-9 on the previous page.

This feature is helpful when planning the layout of a frames-based page or experimenting with frames.

Exercise 10-6: Creating the Nav Bar Slave Document

In this exercise, you will create the nav bar slave document. This document allows easy navigation because it contains the frame content visible on every page of the Web site.

1. Toggle over to Notepad.
2. Open a new document in Notepad.
3. Type the following script:

```
<HTML>
<HEAD>
</HEAD>
<BODY>
<CENTER>
<A HREF=about_dogs.htm TARGET="master"><B>Dog Info</B></A><P>
<HR WIDTH=40% SIZE=6><P>
<A HREF=about_hogs.htm TARGET="master"><B>Hog Info</B></A><P>
<HR WIDTH=40% SIZE=6><P>
<A HREF=about_cats.htm TARGET="master"><B>Cat Info</B></A><P>
<HR WIDTH=40% SIZE=6><P>
<A HREF=about_horses.htm TARGET="master"><B>Horse Info</B></A><P>
</CENTER>
</BODY>
</HTML>
```

4. Save the document as NAV_BAR.HTM in the HTML-2 folder.

Exercise 10-7: Creating the Masthead Slave Document

In this exercise, you will create the masthead slave document that will be visible from each page of the Web site.

1. Open a new document in Notepad.
2. Type the following script:

```
<HTML>
```

```
<HEAD>
```

```
</HEAD>
```

```
<BODY BGCOLOR=navy>
```

```
<CENTER>
```

```
<FONT FACE=arial COLOR=white SIZE=+3>The Animal Information  
Site</FONT>
```

```
</CENTER>
```

```
</BODY>
```

```
</HTML>
```

3. Save the document as MASTHEAD.HTM in the HTML-2 folder.

Exercise 10-8: Creating the “Blank” Content Document

In this exercise, you will create the “blank” content slave document that will occupy the content frame until the user clicks one of the hyperlinks in the nav bar (left frame).

1. Open a new document in Notepad.
2. Type the following script:

```
<HTML>
```

```
<HEAD>
```

```
</HEAD>
```

```
<A NAME="master"></A>
```

```
<FONT SIZE=+2 COLOR=navy>Want to learn more about animals? Click  
the links in the left column....</FONT>
```

```
</HTML>
```

3. Save the document as ABOUT_ANIMALS.HTM in the HTML-2 folder.

Exercise 10-9: Viewing the Master Frame Document

In this exercise, you will view the master frame document. The documents referred to by the hyperlinks in the nav bar have already been created for you.

1. In Notepad, open NAVMASTER.HTM from the HTML-2 folder.
2. Add the script that appears in bold:

```
<FRAMESET ROWS="15%,85%">
```

```
    <FRAME SRC=masthead.htm SCROLLING=no NORESIZE>
```

```
    <FRAMESET COLS="15%,85%">
```

```
        <FRAME SRC=nav_bar.htm NORESIZE>
```

```
        <FRAME SRC=about_animals.htm NAME="master" NORESIZE>
```

3. Save the file. Toggle over to your Web browser and open the NAVMASTER.HTM.
4. Click any of the hyperlinks in the nav bar (left frame).



The right frame (content frame) changes to display the document referred to by the hyperlink you clicked in the nav bar, as shown in Figure 10-10.

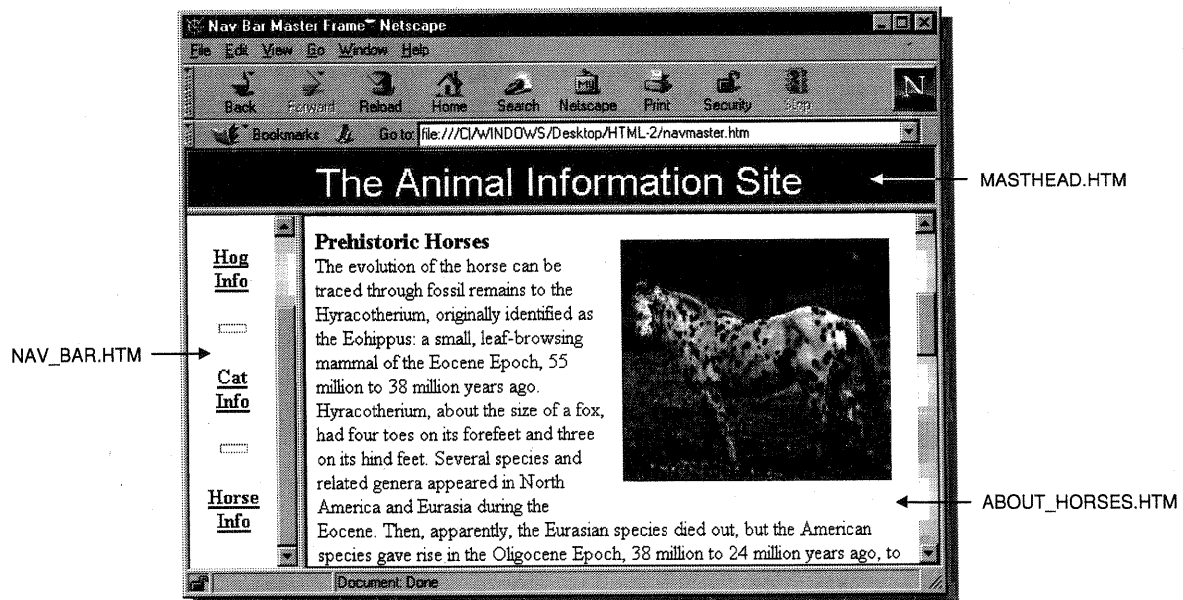


Figure 10-10: Master frame document displaying all slave documents

5. Click other links in the nav bar and notice the content change in the right frame. This is accomplished via TARGET and NAME attributes.

Inline Frames

Inline frames (<IFRAME>) are a new and unique type of Web page frame. Sometimes called “floating frames,” these page elements provide a “window” in a page through which a user can view another Web page. Although not in common usage, this type of frame offers utility and flexibility that will make it increasingly popular.

Flexible & Unique

Unlike conventional frames, inline frames are not relegated to the edge of a Web page. Whereas conventional frames split an entire Web page into a minimum of two frames, inline frames allow a minimum of one frame. Another benefit of inline frames is flexibility. Inline frames can be any size and located nearly anywhere on a page. Figure 10-11 displays an example of an inline frame.

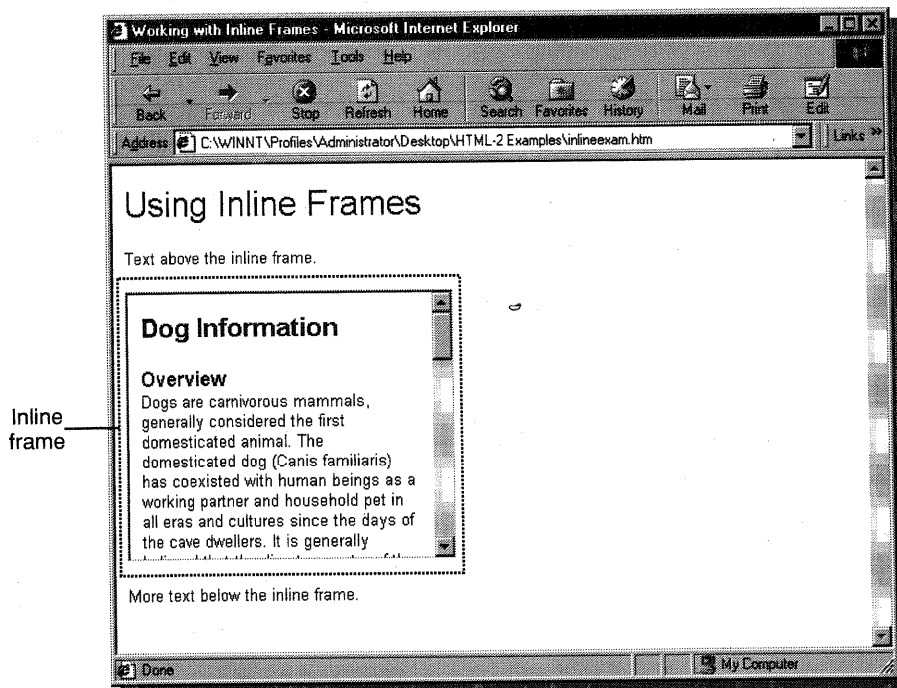


Figure 10-11: An inline frame

<IFRAME> Characteristics

- <IFRAME> tag is non-empty;
- <IFRAME> has nine attributes;
- You can include any type of data within an inline frame, including inline images and stylized (formatted) text.

Not Supported by Netscape

The biggest drawback of inline frames is that they are not currently supported by Netscape Navigator (as of version 4.08, which is a component of Netscape Communicator 4.5). Inline frames are, however, part of the official HTML 4.0 Specification as published by the W3C. It is ironic, given Netscape's leadership role in establishing and promoting HTML standards, that it does not support this new type of frame.

Unless you are scripting pages for an intranet on which all users have Microsoft Internet Explorer 4.0 or more recent (which does support inline frames), you should refrain from using inline frames. In the near future, when both major browsers support inline frames, it will be safe to use them on "public" external Web sites.

Attributes & Values

Table 10-2 outlines the attributes and their associated values for the `<IFRAME>` tag.

Attribute	Values	Comment
ALIGN	left center right top middle bottom	Text flows around an inline frame, regardless of its location.
FRAMEBORDER	1 0	1 = on; 0 = off 1 is the default. Thus, only use this attribute if you desire to turn the frame border OFF.
HEIGHT	number %	number = # of pixels; % = % of browser window
WIDTH	number %	number = # of pixels; % = % of browser window
MARGINHEIGHT	number %	number = # of pixels; % = % of browser window
MARGINWIDTH	number %	number = # of pixels; % = % of browser window
NAME	text string	This provides a target name for the frame.
SCROLLING	yes no	It is typically unwise to turn scrolling off because you have no control over a user's video configuration and browser size.
SRC	URL	SRC functions here identically to its use with standard frames.

Table 10-2: <IFRAME> attributes and attribute values

Exercise 10-10: Using and Manipulating Inline Frames

In this exercise, you will place an inline frame in a Web page and manipulate the frame using a variety of attributes.

If you are using Netscape Navigator, you should skip this exercise as Navigator does not currently recognize inline frames. If you have Microsoft Internet Explorer on your PC, launch it and complete this exercise.

1. Switch to Notepad.
2. Open the file `INLINE_FRAME.HTM` in the HTML-2 folder.
3. Add the following script that appears in bold:

```
<HTML>
<HEAD>
<TITLE>Working with Inline Frames</TITLE>
</HEAD>
<BODY>
<FONT SIZE=+2 COLOR=blue>The 50 United States</FONT>.<P>
To know about America, you have to study the states and their
history.<P>
<IFRAME SRC=ohio.htm WIDTH=50% HEIGHT=240>
</IFRAME><P><BR><P>
For maps of thousands of locations in the United States, consult
the <A HREF=http://www.mapquest.com>MapQuest Web site</A>.
</BODY>
</HTML>
```

4. Save the file.
5. Toggle over to Internet Explorer.
6. Open the file `INLINE_FRAME.HTM` in the HTML-2 folder.



The page is downloaded and displayed, as shown in Figure 10-12.

Note the default alignment of the frame (left) and the default appearance of the frame border and scroll bar (because the content of the frame exceeds its viewable area).

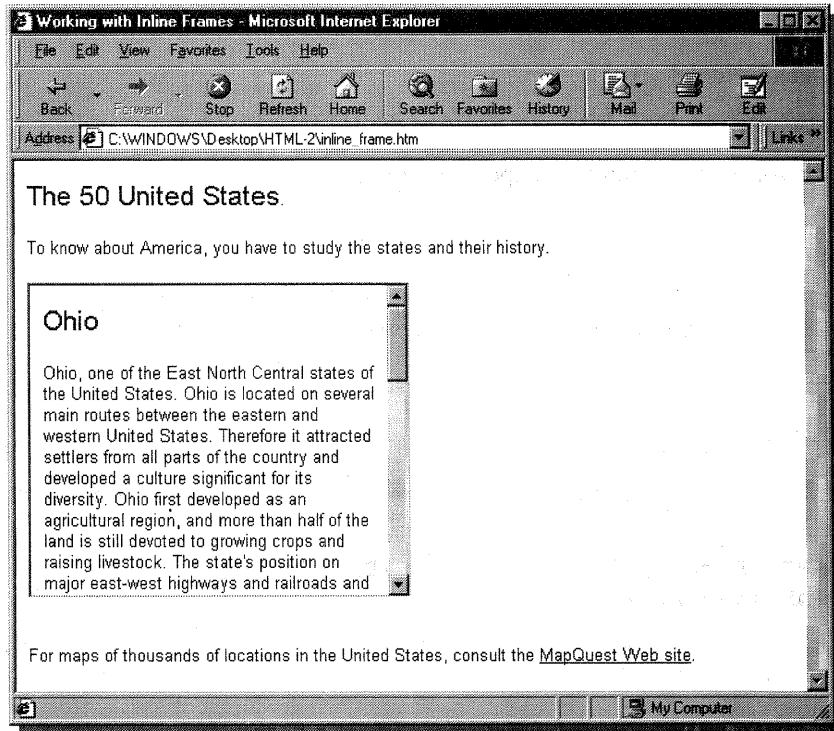


Figure 10-12: Inline frame displaying scrollable information

7. Toggle over to Notepad.
8. Add the following script that appears in bold:

```
<IFRAME SRC=texas.htm WIDTH=50% HEIGHT=240 ALIGN=right>
```

9. Save the document.
10. Toggle over to Internet Explorer and refresh the Web page (<F5>).



The updated page is downloaded and displayed, as shown in Figure 10-13. Note the right alignment of the frame and the new frame content.

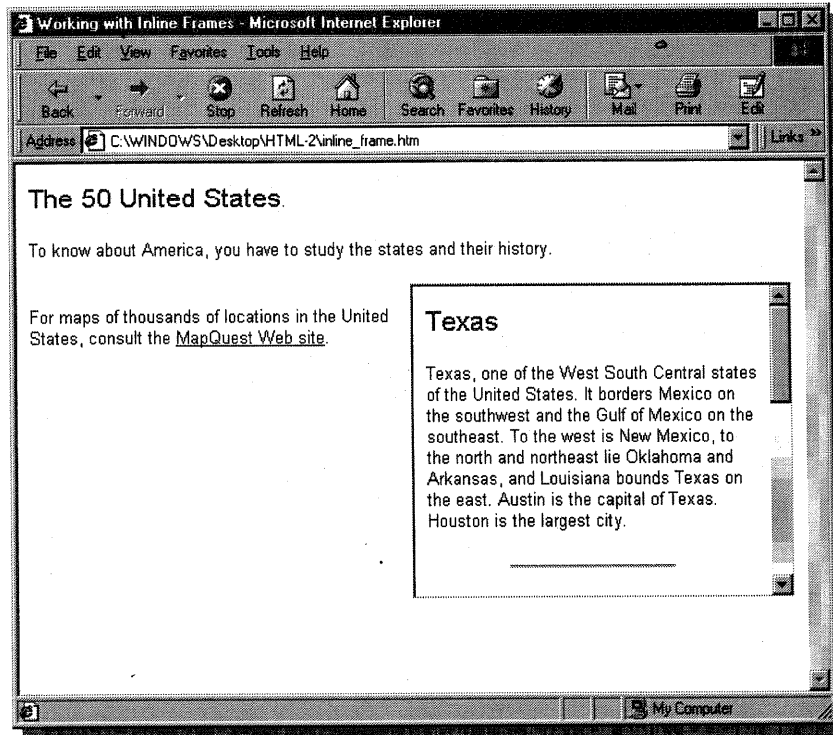


Figure 10-13: Inline frame aligned right

Exercise 10-11: Linking to an Inline Frame

In this exercise, you will create links to an inline frame using the `TARGET` and `NAME` attributes (just like you did in Lesson 8: *Introduction to Frames*). If you are using Netscape Navigator, you should skip this exercise as Navigator does not currently recognize inline frames. If you have Microsoft Internet Explorer on your PC, launch it and complete this exercise.

1. Toggle over to Notepad.
2. Add the bold text that appears below and delete the text shown in bold strikethrough in `INLINE_FRAME.HTM`:

```
<FONT SIZE=+2 COLOR=blue>The 50 United States</FONT>.<P>
```

```
To know about America, you have to study the states and their
history.<P>
```

```
Select a state from the list:<P>
```

```
<UL TYPE=square>
```

```
<LI><A HREF=ohio.htm TARGET="state">Ohio</A>
```

```
<LI><A HREF=texas.htm TARGET="state">Texas</A>
```

```
<LI><A HREF=colorado.htm TARGET="state">Colorado</A>
```

```
<LI><A HREF=virginia.htm TARGET="state">Virginia</A>
```

```
<LI><A HREF=florida.htm TARGET="state">Florida</A>
```

```
<LI><A HREF=tennessee.htm TARGET="state">Tennessee</A>
```

```
<LI><A HREF=california.htm TARGET="state">California</A>
```

```
<LI><A HREF=new_mexico.htm TARGET="state">New Mexico</A>
```

```
<LI><A HREF=georgia.htm TARGET="state">Georgia</A>
```

```
</UL><P>
```

```
<IFRAME SRC=texas.htm NAME="state" WIDTH=50% HEIGHT=240
ALIGN=right>
```

```
</IFRAME><P><BR><P>
```

```
For maps of thousands of locations in the United States, consult
the <A HREF=http://www.mapquest.com>MapQuest Web site</A>.
```

3. Save the file.
4. Toggle over to Internet Explorer.
5. Reload the Web page.



Consult the HTML 4.0 Specification for additional attributes for list tags.



The updated page is downloaded and displayed.

Note the additional hyperlinks added in Step 2. Also note that the inline frame is currently empty.

6. Click the hyperlink labeled Ohio.



The inline frame now displays the content of the OHIO.HTM document, as shown in Figure 10-14.

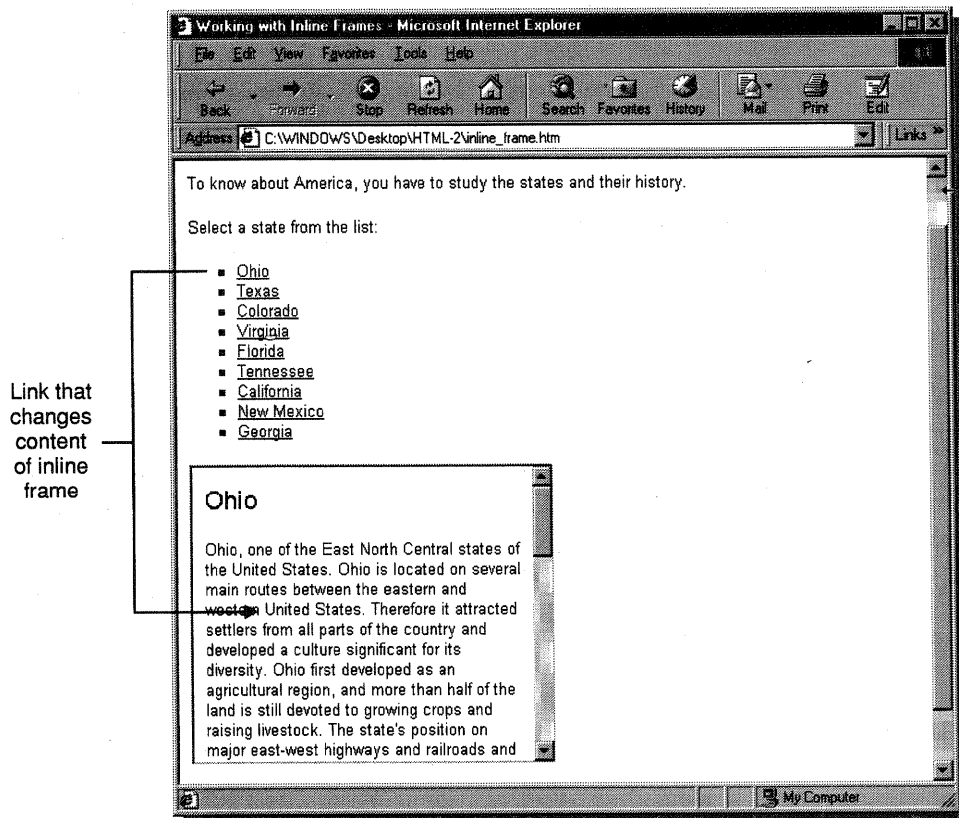


Figure 10-14: TARGET anchor linking to an inline frame in the same page

7. Click the hyperlink labeled Virginia. Note how the content changes in the inline frame. This is an example of combining an inline frame with a TARGET anchor (and NAME attribute within the inline frame opening tag).
8. Click the other hyperlinks to ensure that all of your links are functional. You should always test *all* links in a page.

Lesson 10 Summary

- ▶ You can create hypertext anchors between frames in a frames-enabled Web page. In this manner, you can make your frames pages dynamic and interactive among each other.
- ▶ You can use links between frames to create nav bars, tables of content, and online catalogs.
- ▶ The NAME and TARGET attributes allow you to create links between frames.
- ▶ The NAME attribute is placed inside the <FRAME> tag and provides a unique identifier for it so that an Anchor tag (in a different frame or different Web page) can refer (link) to it.
- ▶ The TARGET attribute is placed inside the Anchor tag and instructs the Anchor tag to display the file to which it links in a particular frame (by identifying a NAME reference within a <FRAME> tag).
- ▶ TARGET attributes can also be used to display a page in a new browser window.
- ▶ You can greatly simplify the script involved in the Anchor tags in a referring frame by using the <BASE> tag. The syntax <BASE TARGET=name> allows you to place a single <BASE> tag within a referring frame and avoid placing TARGET attributes on each <FRAME> tag.
- ▶ If both a hyperlink (Anchor tag) with a TARGET attribute and a <BASE> tag with a TARGET attribute are present in the same referring frame, the Anchor tag TARGET takes precedent.
- ▶ There are four reserved TARGET values (`_blank`, `_self`, `_parent`, and `_top`) that you can use to create unique effects when a user activates an anchor (by clicking). The most popular of these effects is loading a referred Web page into a completely new browser window (thus preserving the referring page and window). This helps prevent you from “losing” users from your Web site when you refer them to a resource that is outside of your site.
- ▶ Before actually scripting a nav bar master frame document, you should carefully plan the layout and contents of the nav bar page frames. This will save you time and frustration and will allow you to create a better navigation scheme for your entire site.
- ▶ Inline frames, new to HTML 4.0, allow a frame to be precisely configured as a single “window” within a Web page that is of the exact width, height, and location on the page that you desire. Inline frames now allow you to include as few as *one* frame on a page (standard frames allow as few as *two* frames on a page). Netscape Navigator 4.0x does not support inline frames, so you should use this new feature carefully.